Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (currently amended) A stent delivery device for delivering a plurality of stents or stent segments to a treatment site in a body lumen, the device comprising:

a catheter shaft having a proximal end and a distal end;

an expandable member coupled with the catheter shaft near the distal end;

at least one implantable carrier disposed over the expandable member, the implantable carrier being dividable at a plurality of locations along its length;

a plurality of stent segments disposed along the carrier; and

a sheath slidably disposed over the implantable carrier to constrain expansion of a proximal portion of the expandable member while allowing expansion of a distal portion of the expandable member, wherein the sheath is adapted to divide the implantable carrier at one of the locations,

wherein ~~the expanded~~ a distal portion of the expandable member expands a distal portion of the implantable carrier and at least one stent segment disposed thereon to ~~deliver~~ deploy the distal portion of the implantable carrier and the at least one stent segment in the body lumen while a second portion of the implantable carrier remains unexpanded within the sheath.

2. (original) A device as in claim 1, wherein the implantable carrier is slidably disposed over the expandable member.

3. (original) A device as in claim 2, further including a carrier shaft coupled with the implantable carrier and disposed over the catheter shaft proximal to the implantable carrier for advancing the carrier distally.

4. (original) A device as in claim 1, wherein the sheath further comprises at least one carrier cutting member disposed to cut the implantable carrier at one or more locations between the stent segments.

5. (original) A device as in claim 4, wherein the carrier cutting member comprises a sharpened edge disposed circumferentially about an inner surface of the sheath at a distal end of the sheath.

6. (original) A device as in claim 5, further including a protective member disposed between the sharpened edge and the expandable member to prevent damage to the expandable member by the sharpened edge.

7. (original) A device as in claim 4, wherein the carrier cutting member acts as a valve member to provide control of a number of stents segments delivered by the device.

8. (original) A device as in claim 4, wherein expanding the expanding member presses the implantable carrier against the carrier cutting member to divide the distal portion of the carrier from a proximal portion of the carrier.

9. (original) A device as in claim 1, wherein the implantable carrier comprises at least one dividable connection between at least the distal portion of the carrier and a proximal portion of the carrier.

10. (original) A device as in claim 9, wherein the at least one dividable connection comprises multiple dividable connections between multiple carrier portions.

11. (original) A device as in claim 9, wherein each of the at least one dividable connections comprises at least one of perforations, frangible connections and an area of material along the carrier that is thinner than immediately adjacent areas of material.

12. (original) A device as in claim 1, wherein the implantable carrier comprises at least one material selected from the group consisting of a polymer, a metal, a metal alloy, a woven polyester, polytetrafluoroethylene, a ceramic, human tissue and animal tissue.

13. (original) A device as in claim 1, wherein the implantable carrier comprises at least one biodegradable or bioresorbable material.

14. (original) A device as in claim 1, wherein the implantable carrier comprises at least one pharmacological or biological agent.

15. (currently amended) A device as in claim 14, wherein the pharmacological agent is selected from the group consisting of Rapamycin, Paclitaxel, Rapamycin or Paclitaxel analogs, ~~Evirolimus~~ Everolimus and derivatives thereof, prodrugs, or derivatives, antibiotics, thrombolytics, anti-thrombotics, anti-inflammatories, cytotoxic agents, anti-proliferative agents, vasodilators, gene therapy agents, radioactive agents, immunosuppressants, chemotherapeutics and stem cells.

16. (original) A device as in claim 1, wherein the implantable carrier is non-porous so as to act as a vascular graft.

17. (original) A device as in claim 1, wherein the implantable carrier comprises a solid tubular wall.

18. (original) A device as in claim 1, wherein the implantable carrier comprises a tubular mesh.

19. (original) A device as in claim 1, wherein the implantable carrier comprises a tubular scaffold.

20. (original) A device as in claim 1, wherein the implantable carrier comprises a helical coil.

21. (original) A device as in claim 1, wherein the implantable carrier comprises multiple axial beams.

22. (Currently amended) A device as in claim 1, wherein the plurality of stent segments are fixedly disposed along the carrier.

23. (Currently amended) A device as in claim 1, further comprising at least one membrane coupled with at least one of the plurality of stent segments.

24. (original) A device as in claim 23, wherein the at least one membrane is permeable.

25. (original) A device as in claim 23, wherein the at least one membrane is impermeable.

26. (currently amended) A device as in claim 23, wherein the at least one membrane comprises a continuous membrane coupled with ~~a plurality~~ the plurality of stent segments.

27. (Currently amended) A device as in claim 23, wherein the at least one membrane comprises a plurality of membranes, each membrane coupled with at least one of the plurality of ~~one of the~~ stent segments.

28. (Currently amended) A device as in claim 23, wherein the at least one membrane comprises a plurality of membranes, each membrane coupled with two or more of the plurality of stent segments.

29. (original) A device as in claim 23, wherein the at least one membrane comprises at least one biodegradable or bioresorbable material.

30. (original) A device as in claim 23, wherein the at least one membrane comprises at least one pharmacological or biological agent.

31. (original) A device as in claim 30, wherein the pharmacological agent is selected from the group consisting of Rapamycin, Paclitaxel, Rapamycin or Paclitaxel analogs, prodrugs, or derivatives, antibiotics, thrombolytics, anti-thrombotics, anti-inflammatories, cytotoxic agents, anti-proliferative agents, vasodilators, gene therapy agents, radioactive agents, immunosuppressants, chemotherapeutics and stem cells.

32. (currently amended) A stent delivery device for delivering a plurality of stents or stent segments to a treatment site in a body lumen, the device comprising:

a catheter shaft having a proximal end and a distal end;

an expandable member coupled with the catheter shaft near the distal end;

at least one implantable membrane disposed over the expandable member, the implantable membrane being dividable at a plurality of locations along its length;

a plurality of stent segments disposed along the membrane; and

a sheath slidably disposed over the implantable membrane to constrain expansion of a proximal portion of the expandable member while allowing expansion of a distal portion of the expandable member, wherein the sheath is adapted to divide the implantable membrane at one of the locations,

wherein ~~the expanded~~ a distal portion of the expandable member expands a distal portion of the implantable membrane and at least one stent segment disposed thereon to ~~deliver~~ deploy the distal portion of the implantable membrane and the at least one stent segment in the body lumen while a second portion of the implantable membrane remains unexpanded within the sheath.

33. (original) A device as in claim 32, wherein the at least one membrane is permeable.

34. (original) A device as in claim 32, wherein the at least one membrane is impermeable.

35. (original) A device as in claim 32, wherein the at least one membrane comprises a continuous membrane coupled with a plurality of stent segments.

36. (Currently amended) A device as in claim 32, wherein the at least one membrane comprises a plurality of membranes, each membrane coupled with at least one of the plurality of ~~one of the~~ stent segments.

37. (Currently amended) A device as in claim 32, wherein the at least one membrane comprises a plurality of membranes, each membrane coupled with two or more of the plurality of stent segments.

38. (original) A device as in claim 32, wherein the at least one membrane comprises at least one biodegradable or bioresorbable material.

39. (original) A device as in claim 32, wherein the at least one membrane is coupled with at least one pharmacological or biological agent.

40. (original) A device as in claim 30, wherein the pharmacological agent is selected from the group consisting of Rapamycin, Paclitaxel, Rapamycin or Paclitaxel analogs, prodrugs, or derivatives, antibiotics, thrombolytics, anti-thrombotics, anti-inflammatories, cytotoxic agents, anti-proliferative agents, vasodilators, gene therapy agents, radioactive agents, immunosuppressants, chemotherapeutics and stem cells.

41. (currently amended) A method for delivering a stent having a plurality of stent segments to a treatment site in a body lumen, the method comprising:

positioning a distal portion of a stent delivery catheter device at the treatment site, the stent delivery catheter having an implantable carrier and a plurality of stent segments disposed along the carrier; and

expanding a distal portion of the implantable carrier and at least one distal stent segment disposed thereon to deploy the distal portion of the carrier and the at least one distal

stent segment while constraining a proximal portion of the implantable carrier and at least one proximal stent segment disposed ~~thereon.~~ thereon; and

dividing the implantable carrier between the distal portion and the proximal portion so as to allow deployment of the distal portion of the implantable carrier and the at least one distal stent segment in the body lumen while a second portion of the implantable carrier remains unexpanded within the sheath.

42. (original) A method as in claim 41, wherein expanding the distal portion of the carrier while constraining the proximal portion comprises moving a sheath proximally to expose an expandable member to allow it to expand against the distal portion of the implantable carrier and the at least one distal stent segment.

43. (original) A method as in claim 42, further comprising moving the sheath proximally to further expose the expandable member to allow it to expand against an additional portion of the implantable carrier and at least one stent segment disposed thereon.

44. (original) A method as in claim 41, further comprising advancing the implantable carrier in a distal direction along the catheter device, using a carrier shaft located proximal to the carrier on the catheter device.

45. (currently amended) A method as in claim 41, ~~further comprising~~ wherein dividing the implantable carrier comprises cutting the implantable carrier with a cutting member to deploy the distal implantable carrier segment.

46. (new) A device as in claim 9, wherein the at least one dividable connection is preformed in the carrier.